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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Robert A Shipman

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EXAMINER

YEN, SYLING

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,106	<b>Applicant(s)</b> SHIPMAN, ROBERT A	
	<b>Examiner</b> SYLING YEN	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 20, 2008 has been entered.
2. This action is responsive to the communication filed on March 20, 2008. Claims 1-28 have been cancelled. Claims 29-54 have been added. Claims 29-54 are pending.

### ***Claim Objections***

3. Claims 41-54 are objected to because of the following informalities:  
Claims 41-54 recite the limitation "data store generation apparatus" is not clear defined in the Applicant's specification. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2165

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 29-30 and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Kraay et al (U.S. Patent 5,956,717 hereinafter, "Kraay").

6. With respect to claim 29,

Kraay discloses **a method of generating a data store** (Kraay col. 4 lines 52-60 and Claim 5 e.g. generates two files of unique sets of telephone numbers contained in the database 12 (CHRONO.DAT). A first of these files, NUMFREQ.DAT for example, comprises the unique telephone numbers sorted in numerical order. It also comprises a count of the number of calls in which that phone number was either the caller or callee, e.g., the frequency. A second file, called FREQORD.DAT for example, comprises the same list of telephone numbers and frequencies, but the data is sorted by frequency; a computer-implemented software program method hosted on a computer that generates two files of unique sets of telephone numbers contained in the first database, a first such file includes said unique telephone numbers sorted in numerical order with a frequency count of the number of calls in which that phone number was either the caller or callee, and a second such file with the same information but the data is sorted by the frequency count) **comprising:**

**generating a plurality of records, wherein each record** (Kraay col. 4 lines 52-60 and Claim 5 e.g. a first such file includes said unique telephone numbers sorted in numerical order with a frequency count of the number of calls in which that phone number was either the caller or callee) **pertains to a respective one of a plurality of**

**users** (Kraay col. 4 lines 52-60 and Claim 5 e.g. either the caller or callee), **wherein each record comprises a searchable identifier** (Kraay col. 3 lines 26-46 e.g. telephone subscribers, such as name, address; the name of one of the telephone subscribers; Examiner has interpreted the above disclosure such that the name is a searchable identifier), **and a linkable identifier** (Kraay col. 3 lines 13-16 and 26-46 e.g. displays relationships between database elements as proportional distances between clickable hypertext points; the address of one of the telephone subscribers), **wherein a record of a first user includes**

**a first field for holding data** (Kraay col. 3 lines 26-46 e.g. the name of one of the telephone subscribers) **about the first user,**

**a second field for holding data about at least one second user** (Kraay col. 4 lines 11-29 e.g. stored telephone call connection records. Each data element in CHRONO.DAT includes caller telephone numbers, callee telephone numbers), **obtained from a database of the first user, and**

**a third field for holding linked data identifying at least one other record** (Kraay col. 6 lines 29-63 e.g. The present invention avoids the clutter generated by traditional link analysis, and yet achieves its benefits without confusing the user with Byzantine and overwhelming volumes of link line elements ... the first and second databases 12 and 14 comprise between them at least one of telephone company toll data and dialed-number-recorder (DNR) records, retail and wholesale sales register transaction records, credit card transaction records, internet packet routing data, e-mail

routing information, caller-ID data captures, and cellular telephone cell-switching and call-routing information), **and**

**identifying one or more records as linked records, which record includes a linkable identifier of the first user** (Kraay col. 6 lines 29-63 e.g. telephone company toll data and dialed-number-recorder (DNR) records, retail and wholesale sales register transaction records, credit card transaction records, internet packet routing data, e-mail routing information, caller-ID data captures, and cellular telephone cell-switching and call-routing information) **as being linked data for inclusion into the third field.**

7. With respect to claim 30,

Kraay further discloses **wherein the searchable identifier is a user identifier** (Kraay col. 3 lines 26-46 e.g. the name of one of the telephone subscribers), **and the linkable identifier one or more of user addresses** (Kraay col. 3 lines 26-46 e.g. address), **telephone numbers, or mobile telephone numbers.**

8. Concerning claim 41-42,

The limitations therein have substantially the same scope as claims 29-30 because claims 41-42 are apparatus claims for implementing those methods of claims 29-30. Therefore claims 41-42 are rejected for at least the same reasons as claims 29-30.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2165

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 31 and 43 are rejected under 35 U.S.C. 103(a) as being obvious by Kraay as applied to claims 29-30 and 41-42 above, in view of De l'Etraz et al (U.S. Patent 6,324,541 hereinafter, "De l'Etraz").

12. With respect to claim 31,

Although Kraay substantially teaches the claimed invention, Kraay does not explicitly indicate the capability of **wherein the database of the first user comprises an address book** (De l'Etraz col. 15 lines 28-30 e.g. in an non-electronic address book format).

De l'Etraz teaches the limitations as stating above.

It would have been obvious to one of ordinary skill in the art of user record searching, at the time of the present invention, having the teachings of Kraay and De

l'Etraz before him/her, to modify the user record searching method of Kraay, wherein the user record searching method would include address book as taught by De l'Etraz because that would have allowed the user record searching method to intelligently establish and present the contacts of contacts and further display (and print) the optimal relationship path to reach desired contacts (i.e., persons or organizations) (De l'Etraz col. 3 lines 21-23).

13. Concerning claim 43,

The limitations therein have substantially the same scope as claim 31 because claim 43 is a apparatus claim for implementing those methods of claim 31. Therefore claim 43 is rejected for at least the same reasons as claim 31.

14. Claims 32-34, 38-40, 44-46 and 50-54 are rejected under 35 U.S.C. 103(a) as being obvious by Kraay as applied to claims 29-30 and 41-42 above, in view of Kolluri et al (U.S. Patent Application 2003/0101286 A1 hereinafter, "Kolluri").

15. With respect to claims 32-34, 38-40, 52 and 54,

Kraay further discloses **"in response to a request from a first user based on a specified searchable identifier, comprising**

**searching for the searchable identifier** (Kraay col. 2 lines 34-40 e.g. key-word searched for one or more subjects; Universal pattern and association searches are conventionally used to combine telephone, surveillance, financial and mail activity, and then to look for any systematic patterns and links. Relational links between a subject, a group, a business, etc., are displayed)



**in the second** (Kraay col. 2 lines 34-40 and col. 3 lines 26-46 e.g. telephone; telephone numbers) **and third fields** (Kraay col. 2 lines 43-64 e.g. Full or partial descriptions can be entered for most searches, and up to nine elements can be combined to create a personalized search) **of the record of the first user, and**

**in other records** (Kraay col. 2 lines 34-40 e.g. Universal pattern and association searches are conventionally used to combine telephone, surveillance, financial and mail activity, and then to look for any systematic patterns and links), **and**

**compiling a list** (Kraay col. 2 lines 43-64 e.g. CIS groups similar data together for both onscreen viewing and printed reports. Information about individuals is categorized into personal information, alias/moniker, associates, criminal activity, and vehicle information. Organizations are categorized into organization information, criminal activity, and vehicle information) **of any or all user records which include the searchable identifier” of claim 34.**

Although Kraay substantially teaches the claimed invention, Kraay does not explicitly indicate the capability of **“ascribing a weighting** (Kolluri paragraph 0113 e.g. links  $(D1 \rightarrow Q2)$ ,  $(Q1 \rightarrow Q2)$  and  $(Q1 \rightarrow D2)$  are inferred relations 34, 33, and 35 in that they did not exist prior to inferred relation weighting process 32 processing the weight of the existing links  $(Q1 \leftrightarrow D1)$ ,  $(Q2 \leftrightarrow D2)$  and  $(D1 \leftrightarrow D2)$ .) **to a linked record.” of claim 32;**

**“identifying reciprocal links** (Kolluri paragraph 0113 e.g. links (D1→Q2), (Q1→Q2) and (Q1→D2) are inferred relations 34, 33, and 35 in that they did not exist prior to inferred relation weighting process 32 processing the weight of the existing links (Q1↔D1), (Q2↔D2) and (D1↔D2).) **for inclusion in the third field of each record identified as including a linkable identifier to and/or from the other” of claim 33;**

**“ordering the list** (Kolluri paragraphs 0035 and 0062 e.g. order the resulting list; Usually a decreasing weighting order) **in accordance with link distance** (Kolluri paragraph 0083 e.g. limiting the link distances to a length of three ... from a first node of the system (A) to a second node of the system) **between a particular record and the record of the first user” of claim 38;**

**“ranking the listed records** (Kolluri paragraphs 0030 e.g. This will result in a score (not shown) being generated for each entry, wherein these entries are ranked within list 26 in accordance with these scores.)” **of claim 39;**

**“identifying a record in dependence on its rank** (Kolluri paragraphs 0038-0039 e.g. detect and identify high quality document ... enhance their document ranking accuracy), **and retrieving information relating to the identified record for presentation to the first user” of claim 40;**

**“wherein the listing means is arranged to rank each of the listed user records based on at least one of its weighting, its link distance from the record of the first user, or its frequency** (Kolluri paragraph 0035 e.g. The final score (or

relevancy score) for each document is computed using the frequency of occurrence) **of occurrence in the list” of claim 52 and 54.**

Kolluri teaches the limitations as stating above.

It would have been obvious to one of ordinary skill in the art of user record searching, at the time of the present invention, having the teachings of Kraay and Kolluri before him/her, to modify the user record searching method of Kraay, wherein the user record searching method would include ranking, ordering, weight, link distance, bi-directional link, frequency as taught by Kolluri because that would have allowed the user record searching method to deliver more robust searching results and further enhance the efficiency of the user record searching method of Kraay (Kolluri paragraph 0018).

16. Concerning claim 44-46, 50-51 and 53,

The limitations therein have substantially the same scope as claims 32-34 and 38-40 because claims 44-46, 50-51 and 53 are apparatus claims for implementing those methods of claims 32-34 and 38-40. Therefore claims 44-46, 50-51 and 53 are rejected for at least the same reasons as claims 32-34 and 38-40.

17. Claims 35-37 and 47-49 are rejected under 35 U.S.C. 103(a) as being obvious by Kraay in view of Kolluri, and further in view of De l'Etraz et al (U.S. Patent 6,324,541 hereinafter, “De l'Etraz”).

18. With respect to claims 35-37,

Kolluri further discloses “**searching for the searchable identifier in a pre-specified set of other records which are a pre-specified link distance** (Kolluri

paragraph 0083 e.g. limiting the link distances to a length of three ... from a first node of the system (A) to a second node of the system) **from the user record of the first user” of claim 37.**

Although Kraay and Kolluri substantially teaches the claimed invention, they do not explicitly indicate the capability of **“searching for the searchable identifier comprises searching for the searchable identifier in the other records** (De l'Etraz col. 24 lines 4-44 e.g. If step 2710 is not successful, the user may then, in step 2714, click the "Local Contact Pathway" (LCP) search button 2212. In step 2716, the CIDM system 100 responds to this input by searching the users' private database(s) 104 in conjunction with the public database(s) 102 for direct contacts (i.e., "Do I have a contact pathway to the inputted person at the inputted organization?")) **only if the searchable identifier is not found** (De l'Etraz col. 24 lines 4-44 e.g. not successful) **in the second and third fields** (De l'Etraz col. 24 lines 4-44 e.g. contact) **of the record of the first user** (De l'Etraz col. 24 lines 4-44 e.g. the person)” **of claim 35;**

**“searching for the searchable identifier in all other records, or a pre-specified set of other records** (De l'Etraz col. 24 lines 4-44 e.g. If step 2710 is not successful, the user may then, in step 2714, click the "Local Contact Pathway" (LCP) search button 2212. In step 2716, the CIDM system 100 responds to this input by searching the users' private database(s) 104 in conjunction with the public database(s) 102 for direct contacts (i.e., "Do I have a contact pathway to the inputted person at the inputted organization?"))” **of claim 36.**

De l'Etraz teaches the limitations as stating above.

It would have been obvious to one of ordinary skill in the art of user record searching, at the time of the present invention, having the teachings of Kraay, Kolluri and De l'Etraz before him/her, to modify the user record searching method of Kraay and Kolluri combination, wherein the user record searching method would include searching other records as taught by De l'Etraz because that would have allowed the user record searching method to intelligently establish and present the contacts of contacts and further display (and print) the optimal relationship path to reach desired contacts (i.e., persons or organizations) (De l'Etraz col. 3 lines 21-23).

19. Concerning claims 47-49,

The limitations therein have substantially the same scope as claims 35-37 because claims 47-49 are system claims for implementing those methods of claims 35-37. Therefore claims 47-49 are rejected for at least the same reasons as claims 35-37.

### ***Response to Arguments***

20. Applicant's remarks and arguments presented on March 20, 2008 have been fully considered, however, they are directed to new limitations that have been addressed in the citation of the detailed office action as discussed above.

### ***Conclusion***

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

21. The examiner requests, in response to this office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

22. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the reference cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SyLing Yen whose telephone number is 571-270-1306. The examiner can normally be reached on Mon-Fri 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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SyLing Yen  
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/Christian P. Chace/

Supervisory Patent Examiner, Art Unit 2165